



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D5489-3

Job Sheet 171084



Rush

Part No: D5489-3

Job Qty: 4 ea

Part Name: Wearplate



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 1/26/18

Job Tracking No:

Created By: Jason Leroux

POSITIVE RECALL

Due Date: 1/29/18

Type: SOLD

Description:

EFFECTIVE 17/01/29 AUTH *SAJ*

Note: IPP REV:A 17.11.03 AS PER DWG REV:A DD VERF:JFS

RELEASED *PD* DATE 18-01-31

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea	1/27/18	1/27/18	0.00	0.00	Start Up Waterjet		<i>OK 18/01/29</i>
100	Waterjet	4 pcs	1/27/18	1/27/18	0.00	1.54	Waterjet1		<i>OK 18/01/29</i>
110	QC	4 pcs	1/27/18	1/27/18	0.00	0.00	QC2 Waterjet-4		<i>OK 18/01/29</i>
120	QC	4 pcs	1/27/18	1/27/18	0.00	0.00	QC8-6		<i>OK</i>
130	Brake NC	4 pcs	1/27/18	1/27/18	0.00	0.72	Brake NC 1		<i>SB DAS</i>
140	QC	4 pcs	1/27/18	1/27/18	0.00	0.00	QC5		<i>38</i>
150	HandFinish	4 pcs	1/29/18	1/29/18	0.00	0.20	HandFinish4		<i>DT 18-01-30</i>
160	QC	4 pcs	1/29/18	1/29/18	0.00	0.00	QC3		<i>PD 18-01-31</i>
170	Packaging	4 pcs	1/29/18	1/29/18	0.00	0.00	Packaging3-2		<i>PD 18-01-31</i>
180	QC21-SA	4 Ea	1/29/18	1/29/18	0.00	0.00	QC21		<i>PD 18-01-31</i>

Part Op 100 - 1-Cut as per Dwg (D5489-3) Dwg Rev: *A* Prog Rev: *A* 2-Deburr if necessary

Descriptions: 150 - COAT ENTIRE TOP (CONCAVE) SURFACE WITH ROCKGUARD AS PER DWG AND PER QSI005 A/R
ROCKGUARD BATCH: _____

170 - LOCATION : FP002

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M304S16GA	304/316 Sheet .063	11.6000 sf (2.9 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M304S16GA	12	127	0

Part Specifications

Specifications could not be found.

Plex 1/26/18 3:26 PM dart.leroux.jason

POSITIVE
RECALL

P.T.O.

FEB 01 2018

DART
AEROSPACE
S036624



Wearplate

PART NO: D5489 - 3
Original Serial #: S036624
Revision:
Operation:
Change No:

Start up Operation

01/29/18
Job No: 171084

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www.dartaerospace.com

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INSPECTION SHEET

[illegible]

Measured by:	<i>ac</i>	Checked by:	<i>93</i>	QC Inspector:	
Date:	<i>18/01/29</i>	Date:	<i>JAN 30 2020</i>	Date:	

Engineering Approval: (If necessary)		Date:	
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Rev	Date	Change	Revised by	Approved
A	14.07.31	New Issue	KJ	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

DAS
53

Date: APR 25 2018

Work Order update only ☒

Work Order: <u>171084</u> Part No. <u>D5489-3</u> NCR No. <u>18-6538</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Water Jet ☐ Engineering ☒ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐			
Date: 18/1/29		Step #:		QTY Effective: DAS 12 9-89		MRB (QSI042) Approval DAS 12 9-89 18/1/29	
Description Work Order Deviation				Disposition		Completed By DAS 12 9-89 18/1/31	
Tooling for wecrplates is not finalized. Weecrplates will be cut and bent to fit Skidtube.				All weecrplates require a test fit on a skidtube prior to shipment. Test fit acceptable 9/18/1/31		Lead hand / Supervisor Approval Verification PD 18.01.31	
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☒ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Temperature/Cure ☐ Power Loss/Surge ☐ Positioned Wrong ☐ Bending ☐ Set-up ☐ Folio/Program ☐ Outside Dimensions ☐ Centre Not Concentric ☐ BOM/Route ☐ Grain ☐ Over/Under tolerance ☐ Cracks ☐ Broken/Damage/Defect ☐ Weld ☐ Part Incorrect ☐ Crimp/Kink/Ripple/Wave ☐ Inspection Incomplete/Unqualified ☐ Wrong Stock Pulled ☐ Part Lost/Missing ☐ Cuffs ☐ Contamination ☐ Out of Sequence ☐ Part Moved ☐ Crushing ☐ Countersink ☐ Off-set ☐ Drawing ☐ Heat Treat ☐ Cut Too Short ☐ Misabeled ☐ Finish ☐ Wave/Twist in Tube ☐ Instructions Incomplete/Unclear ☐ Fit/Function ☐ Misread ☐ Marks/Chatter ☐ Drill Holes ☐ Misaligned/off center ☐ Turning Sequence ☐			
OTHER :							

REFERENCE ONLY

D5489-3 WEARPLATE
(MAKE FROM D5489-3F)

D5489-3F WEARPLATE
(FLAT PATTERN)

UNDER REVIEW
URF17-729 NO

- NOTES:
- 1) MATERIAL: AISI 304/316 SS SHEET ANNEALED, 16 GAUGE (0.063"), PER MIL-S-5059 OR AMS 5513 (304), OR AMS 5524 (316), OR ASTM A240, OR ASME SA240
REF DART MATERIAL SPEC M304S16GA
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: PER DART QSI 044 6.1
 - 7) WEIGHT: 2.7 lbs
 - 8) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING 0.020-0.040 THICK, PER DART QSI 005 4.9

RELEASE
2017-10-31

DESIGN	SAD	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	NO		
CHECKED	AJS	DRAWING NO.	REV. A
MFG. APPR.	DD	D5489	SHEET 3 OF 7
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	WEARPLATE	NTS
DATE	17.08.10	COPYRIGHT © 2017 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

Non-Conformance Report

Reviewed
DQA:
Date:

Printed on: Tuesday, January 30, 2018

Details			
Raised Date 11/8/2017	Status Open	Owner Monterroza, William	Number NCR17-6673
Target Date 2/28/2018	Standard		Severity MINOR
Process Inspection		Audit	
Raised By Person Downing, Eric M	Raised Against (Department or Supplier) Engineering		Fault Category General\Design
Details due to manufacturing issue the following wear plate flat patterns were deviated from drawing.D5489-041, D5489-3, D5489-045 & D5489-047			
Keywords D412-742		Product D412-742	
Document		Root Cause Design	
Closed By	Closed Date	Resolution	

Root Cause			
Target Date 11/18/2017	Owner Downing, Eric M	Closed Date 11/8/2017	Closed By Downing, Eric M
Details parts were deviated due to manufacturing of first time parts. correct planning and tooling were not put in place prior to releasing design.			

Actions			
Number	Owner	Target Date	Completed Date
Details		Response	

Corrective Action			
Target Date 2/28/2018	Owner Monterroza, William	Closed Date	Closed By
Details			

Actions			
Number	Owner	Target Date	Completed Date
Details		Response	
1	Duval, David	2/28/2018	
adjust manufacturing process of create tooling.			

Implementing Corrective Action			
Target Date	Owner	Closed Date	Closed By
2/28/2018	Monterroza, William		
Details			

Actions			
Number	Owner	Target Date	Completed Date
Details		Response	
2	Monterroza, William	11/17/2017	11/9/2017
Implement action to prevent this from reoccurring,Assign Engineering personnel		Assign Steven and Nazim	

Verification & Review			
Target Date	Owner	Closed Date	Closed By
2/28/2018	Downing, Eric M		
Details			

Actions			
Number	Owner	Target Date	Completed Date
Details		Response	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☒		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒		
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date : 18-01-30		Step #: 120		QTY Effective : 4			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
NCR 17-6673				Fabricate as per drawing mock up				Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
								PD 18-01-30	
								PD 18-01-30	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☒	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☒				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							